RAW SEQUENCE LISTING
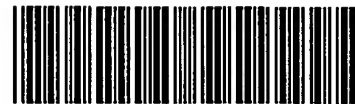
The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _____10/537, 088 A_____

Source: _____I FW 16_____

Date Processed by STIC: _____09/12/2006_____

ENTERED

IFW16

RAW SEQUENCE LISTING   DATE: 09/12/2006
PATENT APPLICATION: **US/10/537,088A**   TIME: 17:41:44

Input Set : **A:\16096.seq.txt**
Output Set: **N:\CRF4\09122006\J537088A.raw**

```
 3 <110> APPLICANT: XENOME LTD
 4       LEWIS, Richard James
 5       ALEWOOD, Paul Francis
 6       ALEWOOD, Dianne
 7       PALANT, Elka
 9 <120> TITLE OF INVENTION: NOVEL CHI-CONOTOXIN PEPTIDES (-II)
11 <130> FILE REFERENCE: 12373580/JGC
```
C--> `13 <140> CURRENT APPLICATION NUMBER: US/10/537,088A`
C--> `13 <141> CURRENT FILING DATE: 2005-12-27`
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13 <150> PRIOR APPLICATION NUMBER: US 60/430307
14 <151> PRIOR FILING DATE: 2002-12-02
16 <160> NUMBER OF SEQ ID NOS: 215
18 <170> SOFTWARE: PatentIn version 3.2
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 13
22 <212> TYPE: PRT
23 <213> ORGANISM: Conus marmoreus
26 <220> FEATURE:
27 <221> NAME/KEY: MISC_FEATURE
28 <222> LOCATION: (12)..(12)
29 <223> OTHER INFORMATION: Xaa is 4-hydroxyproline
31 <400> SEQUENCE: 1
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W--> `33 Asn Gly Val Cys Cys Gly Tyr Lys Leu Cys His Xaa Cys`
```
34 1               5                   10
37 <210> SEQ ID NO: 2
38 <211> LENGTH: 13
39 <212> TYPE: PRT
40 <213> ORGANISM: Conus marmoreus
43 <220> FEATURE:
44 <221> NAME/KEY: MISC_FEATURE
45 <222> LOCATION: (12)..(12)
46 <223> OTHER INFORMATION: Xaa is 4-hydroxyproline
48 <400> SEQUENCE: 2
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W--> `50 Val Gly Val Cys Cys Gly Tyr Lys Leu Cys His Xaa Cys`
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51 1               5                   10
54 <210> SEQ ID NO: 3
55 <211> LENGTH: 10
56 <212> TYPE: PRT
57 <213> ORGANISM: Artificial Sequence
59 <220> FEATURE:
60 <223> OTHER INFORMATION: synthetic
63 <220> FEATURE:
64 <221> NAME/KEY: MISC_FEATURE
```

```
      65 <222> LOCATION: (8)..(9)
      66 <223> OTHER INFORMATION: Xaa is independently absent or represent any amino acid
residue
      67        except Cys
      69 <400> SEQUENCE: 3
W--> 71 Cys Cys Gly Tyr Lys Leu Cys Xaa Xaa Cys
      72 1               5                   10
      75 <210> SEQ ID NO: 4
      76 <211> LENGTH: 14
      77 <212> TYPE: PRT
      78 <213> ORGANISM: Artificial Sequence
      80 <220> FEATURE:
      81 <223> OTHER INFORMATION: synthetic
      84 <220> FEATURE:
      85 <221> NAME/KEY: MISC_FEATURE
      86 <222> LOCATION: (1)..(1)
      87 <223> OTHER INFORMATION: Xaa is selected from Trp, DTrp, Tyr, Phe, hPhe, Ala,
      88        O-methyl-L-tyrosine, Arg, benzoyl, naphthyl, ornithine, L or D
      89        pyroglutamic acid and a deletion
      91 <220> FEATURE:
      92 <221> NAME/KEY: MISC_FEATURE
      93 <222> LOCATION: (2)..(2)
      94 <223> OTHER INFORMATION: Xaa is selected from Arg, Ala, Asn, Lys, Phe, L-beta-
homolysine,
      95        L-ornithine, Lys, DArg, L-norleucine, Dlys, L-Lysine(dimethyl),
      96        DAsn, Thr, 2-aminobenzoyl (anthraniloyl), naphthyl, L-citrulline,
      97        Val, Tyr, Trp, L or D-pyroglutamic acid or a deletion
      99 <220> FEATURE:
     100 <221> NAME/KEY: MISC_FEATURE
     101 <222> LOCATION: (3)..(3)
     102 <223> OTHER INFORMATION: Xaa is selected from Gly, Asp, Lys, Arg, Ala, Nle, Ser or
Phe
     104 <220> FEATURE:
     105 <221> NAME/KEY: MISC_FEATURE
     106 <222> LOCATION: (4)..(4)
     107 <223> OTHER INFORMATION: Xaa is selected from Val, Leu, Nle, Ile, Thr, Ala, Asn, Trp,
Phe
     108        and Abu
     110 <220> FEATURE:
     111 <221> NAME/KEY: MISC_FEATURE
     112 <222> LOCATION: (12)..(13)
     113 <223> OTHER INFORMATION: Xaa are independently absent or represent any amino acid
residue
     114        except Cys
     116 <400> SEQUENCE: 4
W--> 118 Xaa Xaa Xaa Xaa Cys Cys Gly Tyr Lys Leu Cys Xaa Xaa Cys
     119 1               5                   10
     122 <210> SEQ ID NO: 5
     123 <211> LENGTH: 14
     124 <212> TYPE: PRT
     125 <213> ORGANISM: Artificial Sequence
     127 <220> FEATURE:
     128 <223> OTHER INFORMATION: synthetic
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131 <220> FEATURE:

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Input Set : A:\16096.seq.txt
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132 <221> NAME/KEY: MISC_FEATURE
133 <222> LOCATION: (1)..(1)
134 <223> OTHER INFORMATION: Xaa is selected from L or D-pyroglutamic acid, Pro,
135   4-hydroxyproline or an N-acetylated amino acid residue
137 <220> FEATURE:
138 <221> NAME/KEY: MISC_FEATURE
139 <222> LOCATION: (2)..(2)
140 <223> OTHER INFORMATION: Xaa is selected from Arg, DArg, Asn, DAsn, Lys, Thr, DLys,
141   L-beta-homolysine, L-ornithine, L-norleucine,
142   L-lysine(dimethyl), 2-aminobenzoyl(anthraniloyl), naphthyl,
143   L-citrulline, Val and a deletion
145 <220> FEATURE:
146 <221> NAME/KEY: MISC_FEATURE
147 <222> LOCATION: (3)..(3)
148 <223> OTHER INFORMATION: Xaa is selected from Gly, Asp, Lys, Arg, Ala, L-norleucine
and
149   Ser
151 <220> FEATURE:
152 <221> NAME/KEY: MISC_FEATURE
153 <222> LOCATION: (4)..(4)
154 <223> OTHER INFORMATION: Xaa is selected from Val, Leu, L-norleucine, Ile, Thr, Ala
and
155   L-alpha-aminobutyric acid
157 <220> FEATURE:
158 <221> NAME/KEY: MISC_FEATURE
159 <222> LOCATION: (12)..(13)
160 <223> OTHER INFORMATION: Xaa are independently absent or represent any amino acid
residue
161   except Cys
163 <400> SEQUENCE: 5
W--> 165 Xaa Xaa Xaa Xaa Cys Cys Gly Tyr Lys Leu Cys Xaa Xaa Cys
166 1   5   10
169 <210> SEQ ID NO: 6
170 <211> LENGTH: 13
171 <212> TYPE: PRT
172 <213> ORGANISM: Artificial Sequence
174 <220> FEATURE:
175 <223> OTHER INFORMATION: synthetic
178 <220> FEATURE:
179 <221> NAME/KEY: MISC_FEATURE
180 <222> LOCATION: (1)..(1)
181 <223> OTHER INFORMATION: Xaa is selected from Arg, DArg, L-lysine(dimethyl), L-
ornithine
182   or L-beta-homolysine
184 <220> FEATURE:
185 <221> NAME/KEY: MISC_FEATURE
186 <222> LOCATION: (2)..(2)
187 <223> OTHER INFORMATION: Xaa is selected from Gly, Asp, Lys, Arg, Ala, L-norleucine
and
188   Ser
190 <220> FEATURE:
191 <221> NAME/KEY: MISC_FEATURE
192 <222> LOCATION: (3)..(3)

193 <223> OTHER INFORMATION: Xaa is selected from Val, Leu, L-norleucine, Ile, Thr, Ala and

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Input Set : A:\16096.seq.txt
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```
      194        L-alpha-aminobutyric acid
      196 <220> FEATURE:
      197 <221> NAME/KEY: MISC_FEATURE
      198 <222> LOCATION: (11)..(12)
      199 <223> OTHER INFORMATION: Xaa are independently absent or represent any amino acid
residue
      200        except Cys
      202 <400> SEQUENCE: 6
W--> 204 Xaa Xaa Xaa Cys Cys Gly Tyr Lys Leu Cys Xaa Xaa Cys
      205 1               5                10
      208 <210> SEQ ID NO: 7
      209 <211> LENGTH: 13
      210 <212> TYPE: PRT
      211 <213> ORGANISM: Conus marmoreus
      214 <220> FEATURE:
      215 <221> NAME/KEY: MISC_FEATURE
      216 <222> LOCATION: (12)..(12)
      217 <223> OTHER INFORMATION: Xaa is 4-hydroxyproline
      219 <400> SEQUENCE: 7
W--> 221 Gly Val Cys Cys Gly Tyr Lys Leu Cys Cys His Xaa Cys
      222 1               5                10
      225 <210> SEQ ID NO: 8
      226 <211> LENGTH: 11
      227 <212> TYPE: PRT
      228 <213> ORGANISM: Conus marmoreus
      231 <220> FEATURE:
      232 <221> NAME/KEY: MISC_FEATURE
      233 <222> LOCATION: (10)..(10)
      234 <223> OTHER INFORMATION: Xaa is 4-hydroxyproline
      236 <400> SEQUENCE: 8
W--> 238 Val Cys Cys Gly Tyr Lys Leu Cys His Xaa Cys
      239 1               5                10
      242 <210> SEQ ID NO: 9
      243 <211> LENGTH: 12
      244 <212> TYPE: PRT
      245 <213> ORGANISM: Conus marmoreus
      248 <220> FEATURE:
      249 <221> NAME/KEY: MISC_FEATURE
      250 <222> LOCATION: (11)..(11)
      251 <223> OTHER INFORMATION: Xaa is 4-hydroxyproline
      253 <400> SEQUENCE: 9
W--> 255 Gly Ile Cys Cys Gly Val Ser Phe Cys Tyr Xaa Cys
      256 1               5                10
      259 <210> SEQ ID NO: 10
      260 <211> LENGTH: 11
      261 <212> TYPE: PRT
      262 <213> ORGANISM: Artificial Sequence
      264 <220> FEATURE:
      265 <223> OTHER INFORMATION: synthetic
      268 <220> FEATURE:
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```
269 <221> NAME/KEY: MOD_RES
270 <222> LOCATION: (11)..(11)
271 <223> OTHER INFORMATION: AMIDATION
273 <400> SEQUENCE: 10
275 Ala Cys Cys Gly Tyr Lys Leu Cys Ser Pro Cys
276 1               5                   10
279 <210> SEQ ID NO: 11
280 <211> LENGTH: 13
281 <212> TYPE: PRT
282 <213> ORGANISM: Artificial Sequence
284 <220> FEATURE:
285 <223> OTHER INFORMATION: synthetic
287 <400> SEQUENCE: 11
289 Asn Gly Val Cys Cys Gly Tyr Lys Leu Cys Leu Pro Cys
290 1               5                   10
293 <210> SEQ ID NO: 12
294 <211> LENGTH: 12
295 <212> TYPE: PRT
296 <213> ORGANISM: Artificial Sequence
298 <220> FEATURE:
299 <223> OTHER INFORMATION: synthetic
301 <400> SEQUENCE: 12
303 Ser Val Cys Cys Gly Tyr Lys Leu Cys Phe Pro Cys
304 1               5                   10
307 <210> SEQ ID NO: 13
308 <211> LENGTH: 14
309 <212> TYPE: PRT
310 <213> ORGANISM: Artificial Sequence
312 <220> FEATURE:
313 <223> OTHER INFORMATION: synthetic
316 <220> FEATURE:
317 <221> NAME/KEY: MISC_FEATURE
318 <222> LOCATION: (8)..(8)
319 <223> OTHER INFORMATION: Xaa is O-methyl-L-tyrosine
321 <220> FEATURE:
322 <221> NAME/KEY: MISC_FEATURE
323 <222> LOCATION: (13)..(13)
324 <223> OTHER INFORMATION: Xaa is 4-hydroxyproline
326 <400> SEQUENCE: 13
W--> 328 Tyr Arg Gly Leu Cys Cys Gly Xaa Lys Leu Cys Arg Xaa Cys
329 1               5                   10
332 <210> SEQ ID NO: 14
333 <211> LENGTH: 14
334 <212> TYPE: PRT
335 <213> ORGANISM: Artificial Sequence
337 <220> FEATURE:
338 <223> OTHER INFORMATION: synthetic
341 <220> FEATURE:
342 <221> NAME/KEY: MISC_FEATURE
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 09/12/2006
PATENT APPLICATION: US/10/537,088A   TIME: 17:41:45

Input Set : A:\16096.seq.txt
Output Set: N:\CRF4\09122006\J537088A.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 12
Seq#:2; Xaa Pos. 12
Seq#:3; Xaa Pos. 8,9
Seq#:4; Xaa Pos. 1,2,3,4,12,13
Seq#:5; Xaa Pos. 1,2,3,4,12,13
Seq#:6; Xaa Pos. 1,2,3,11,12
Seq#:7; Xaa Pos. 12
Seq#:8; Xaa Pos. 10
Seq#:9; Xaa Pos. 11
Seq#:13; Xaa Pos. 8,13
Seq#:14; Xaa Pos. 4,8,13
Seq#:15; Xaa Pos. 1,5,9,14
Seq#:16; Xaa Pos. 8,13
Seq#:17; Xaa Pos. 1,4,8,13
Seq#:18; Xaa Pos. 5,9,14
Seq#:19; Xaa Pos. 1,3,7,9,12
Seq#:20; Xaa Pos. 8,13
Seq#:21; Xaa Pos. 8,13
Seq#:22; Xaa Pos. 5,9,14
Seq#:23; Xaa Pos. 2,5,9,14
Seq#:24; Xaa Pos. 8
Seq#:25; Xaa Pos. 8,13
Seq#:26; Xaa Pos. 13
Seq#:27; Xaa Pos. 1,3,9,12
Seq#:28; Xaa Pos. 5,9,14
Seq#:29; Xaa Pos. 8
Seq#:30; Xaa Pos. 13
Seq#:31; Xaa Pos. 7
Seq#:32; Xaa Pos. 1,3,7,12
Seq#:33; Xaa Pos. 13
Seq#:34; Xaa Pos. 8,13
Seq#:35; Xaa Pos. 7,12
Seq#:36; Xaa Pos. 8
Seq#:37; Xaa Pos. 8
Seq#:39; Xaa Pos. 13
Seq#:40; Xaa Pos. 8
Seq#:41; Xaa Pos. 1,5,9,14
Seq#:42; Xaa Pos. 1,3,7,9,12
Seq#:43; Xaa Pos. 13
Seq#:44; Xaa Pos. 7,12
Seq#:45; Xaa Pos. 1,3,7,12
Seq#:46; Xaa Pos. 8,13
Seq#:47; Xaa Pos. 3,7,9,12
Seq#:48; Xaa Pos. 1,3,7,9,12

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 09/12/2006
PATENT APPLICATION: US/10/537,088A   TIME: 17:41:45

Input Set : A:\16096.seq.txt
Output Set: N:\CRF4\09122006\J537088A.raw

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Seq#:49; Xaa Pos. 1,9,12
Seq#:50; Xaa Pos. 4
Seq#:51; Xaa Pos. 1,7,12
Seq#:52; Xaa Pos. 1,3,9,12
Seq#:53; Xaa Pos. 8
Seq#:55; Xaa Pos. 5,9,14
Seq#:56; Xaa Pos. 10
```

```
L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:33 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:71 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:118 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:221 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:255 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:358 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:393 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
L:453 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:483 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
L:523 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
L:548 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:573 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:603 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:638 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
L:663 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:688 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0
L:708 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
L:743 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
L:773 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
L:793 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
L:813 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
L:833 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0
L:868 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
L:888 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
L:918 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0
L:943 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0
L:963 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0
L:983 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0
L:1017 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0
L:1037 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0
L:1076 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0
L:1116 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
L:1136 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0
L:1165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0
L:1200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0
L:1225 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0
L:1260 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0
L:1300 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0
L:1330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0
L:1354 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0
```

```
L:1384 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:0
L:1423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:0
L:1443 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:0
L:1487 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:0
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